

5. Stucker

#20  
Page 1 of 7  
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TECHNICAL 1600/2900  
1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/555,534B

DATE: 11/13/2002

TIME: 09:42:25

Input Set : A:\EP.txt

Output Set: N:\CRF4\11132002\I555534B.raw

3 <110> APPLICANT: Istituto Superiore di Sanit.  
4 ENSOLI, Barbara  
6 <120> TITLE OF INVENTION: HIV-1 Tat, or derivatives thereof, alone or in combination,  
for  
7 prophylactic and therapeutic vaccination against AIDS, tumors and related  
8 syndromes  
10 <130> FILE REFERENCE: 1354PTWO  
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/555,534B  
C--> 12 <141> CURRENT FILING DATE: 2002-11-05  
12 <150> PRIOR APPLICATION NUMBER: RM97A000743  
13 <151> PRIOR FILING DATE: 1997-12-01  
15 <160> NUMBER OF SEQ ID NOS: 36  
17 <170> SOFTWARE: PatentIn version 3.1  
19 <210> SEQ ID NO: 1  
20 <211> LENGTH: 261  
21 <212> TYPE: DNA  
22 <213> ORGANISM: Aids-associated retrovirus  
24 <220> FEATURE:  
25 <221> NAME/KEY: CDS  
26 <222> LOCATION: (1)..(261)  
27 <223> OTHER INFORMATION: name: wt tat  
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31 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt 48  
32 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser,  
33 1 5 10 15  
35 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt 96  
36 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe  
37 20 25 30  
39 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc 144  
40 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly  
41 35 40 45  
43 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act 192  
44 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr  
45 50 55 60  
47 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac 240  
48 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp  
49 65 70 75 80  
51 ccg aca ggc ccg aag gaa tag 261  
52 Pro Thr Gly Pro Lys Glu  
53 85  
56 <210> SEQ ID NO: 2  
57 <211> LENGTH: 86  
58 <212> TYPE: PRT  
59 <213> ORGANISM: Aids-associated retrovirus

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61 <400> SEQUENCE: 2
63 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
64 1 5 10 15
67 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
68 20 25 30
71 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
72 35 40 45
75 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
76 50 55 60
79 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
80 65 70 75 80
83 Pro Thr Gly Pro Lys Glu
84 85
87 <210> SEQ ID NO: 3
88 <211> LENGTH: 261
89 <212> TYPE: DNA
90 <213> ORGANISM: Aids-associated retrovirus
92 <220> FEATURE:
93 <221> NAME/KEY: CDS
94 <222> LOCATION: (1)..(261)
95 <223> OTHER INFORMATION: name: Cys22 tat
98 <400> SEQUENCE: 3
99 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt 48
100 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
101 1 5 10 15
103 cag cct aaa act gct ggt acc aat tgc tat tgt aaa aag tgt tgc ttt 96
104 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
105 20 25 30
107 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc 144
108 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
109 35 40 45
111 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act 192
112 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
113 50 55 60
115 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac 240
116 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
117 65 70 75 80
119 ccg aca ggc ccg aag gaa tag 261
120 Pro Thr Gly Pro Lys Glu
121 85
124 <210> SEQ ID NO: 4
125 <211> LENGTH: 86
126 <212> TYPE: PRT
127 <213> ORGANISM: Aids-associated retrovirus
129 <400> SEQUENCE: 4
131 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
132 1 5 10 15
135 Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
136 20 25 30

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139 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
140      35      40      45
143 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
144      50      55      60
147 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
148 65      70      75      80
151 Pro Thr Gly Pro Lys Glu
152      85
155 <210> SEQ ID NO: 5
156 <211> LENGTH: 261
157 <212> TYPE: DNA
158 <213> ORGANISM: Aids-associated retrovirus
160 <220> FEATURE:
161 <221> NAME/KEY: CDS
162 <222> LOCATION: (1)..(261)
163 <223> OTHER INFORMATION: name: Lys41 tat
166 <400> SEQUENCE: 5
167 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt      48
168 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
169 1      5      10      15
171 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
172 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
173      20      25      30
175 cat tgc caa gtt tgt ttc ata aca acc gcc tta ggc atc tcc tat ggc      144
176 His Cys Gln Val Cys Phe Ile Thr Thr Ala Leu Gly Ile Ser Tyr Gly
177      35      40      45
179 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act      192
180 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
181      50      55      60
183 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac      240
184 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
185 65      70      75      80
187 ccg aca ggc ccg aag gaa tag      261
188 Pro Thr Gly Pro Lys Glu
189      85
192 <210> SEQ ID NO: 6
193 <211> LENGTH: 86
194 <212> TYPE: PRT
195 <213> ORGANISM: Aids-associated retrovirus
197 <400> SEQUENCE: 6
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200 1      5      10      15
203 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
204      20      25      30
207 His Cys Gln Val Cys Phe Ile Thr Thr Ala Leu Gly Ile Ser Tyr Gly
208      35      40      45
211 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
212      50      55      60
215 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp

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216 65          70          75          80
219 Pro Thr Gly Pro Lys Glu
220          85
223 <210> SEQ ID NO: 7
224 <211> LENGTH: 252
225 <212> TYPE: DNA
226 <213> ORGANISM: Aids-associated retrovirus
228 <220> FEATURE:
229 <221> NAME/KEY: CDS
230 <222> LOCATION: (1)..(252)
231 <223> OTHER INFORMATION: name: RGD tat
234 <400> SEQUENCE: 7
235 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt      48
236 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
237 1          5          10          15
239 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
240 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
241          20          25          30
243 cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc      144
244 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
245          35          40          45
247 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act      192
248 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
249          50          55          60
251 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc ccg aca ggc      240
252 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
253 65          70          75          80
255 ccg aag gaa tag      252
256 Pro Lys Glu
260 <210> SEQ ID NO: 8
261 <211> LENGTH: 83
262 <212> TYPE: PRT
263 <213> ORGANISM: Aids-associated retrovirus
265 <400> SEQUENCE: 8
267 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
268 1          5          10          15
271 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
272          20          25          30
275 His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
276          35          40          45
279 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
280          50          55          60
283 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
284 65          70          75          80
287 Pro Lys Glu
291 <210> SEQ ID NO: 9
292 <211> LENGTH: 252
293 <212> TYPE: DNA
294 <213> ORGANISM: Aids-associated retrovirus

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296 <220> FEATURE:
297 <221> NAME/KEY: CDS
298 <222> LOCATION: (1)..(252)
299 <223> OTHER INFORMATION: name: Lys 41 RGD
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303 atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt      48
304 Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
305 1          5          10          15
307 cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt      96
308 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
309          20          25          30
311 cat tgc caa gtt tgt ttc ata aca acc gcc tta ggc atc tcc tat ggc      144
312 His Cys Gln Val Cys Phe Ile Thr Thr Ala Leu Gly Ile Ser Tyr Gly
313          35          40          45
315 agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act      192
316 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
317          50          55          60
319 cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc ccg aca ggc      240
320 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
321 65          70          75          80
323 ccg aag gaa tag      252
324 Pro Lys Glu
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329 <211> LENGTH: 83
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333 <400> SEQUENCE: 10
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336 1          5          10          15
339 Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
340          20          25          30
343 His Cys Gln Val Cys Phe Ile Thr Thr Ala Leu Gly Ile Ser Tyr Gly
344          35          40          45
347 Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
348          50          55          60
351 His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
352 65          70          75          80
355 Pro Lys Glu
359 <210> SEQ ID NO: 11
360 <211> LENGTH: 20
361 <212> TYPE: PRT
362 <213> ORGANISM: Aids-associated retrovirus
364 <400> SEQUENCE: 11
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367 1          5          10          15
370 Gln Pro Lys Thr
371          20
374 <210> SEQ ID NO: 12
375 <211> LENGTH: 20

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**VERIFICATION SUMMARY**

DATE: 11/13/2002

PATENT APPLICATION: US/09/555,534B

TIME: 09:42:26

Input Set : A:\EP.txt

Output Set: N:\CRF4\11132002\I555534B.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date